

REMARKS

Claims 1-3, 8-20, 24-37 and 39-54 (as re-numbered) are pending the subject application. No claims have been indicated to be allowable.

35 USC 102

Claims 1-3, 5-6, 11-14, 16-23, 28-31, 33-36, 44-47, 49 and 51 stand rejected under 35 USC 102 as being anticipated by Nakashima et al, U.S. Patent No. 4,645.662A. This rejection is traversed.

Briefly, Applicants' claims, as now amended, recite a method of inhibiting an undesirable taste in an oral composition, said method comprising adding a sulfated polysaccharide, preferably a carrageenan, to an oral composition having at least one component having an undesirable taste. The component having an undesirable taste comprises at least one amino acid. Oral compositions comprising an orally a component having at least one amino acid and a sulfated polysaccharide, preferably a carrageenan, are also claimed by Applicants.

Nakashima et al. disclose an oral composition for preventing and remedying dentinal hypersensitivity which comprises containing therein aluminum and a carboxylate compound in solubilized state, The Examiner has suggested that aluminum hydroxide has a metallic and stringent taste in its soluble form and hence provides unpleasant feeling to the user. Nakashima et al. teaches that when the oral composition is used in the form of paste such as toothpaste, it is incorporated with one or more binders such as carrageenan, and cellulose derivatives, e.g. hydroxyalkylcellulose. At Col 5, line 63, Nakashima et al. state, "Using hydroxylalkylcellulose alone may aggravate the formability and stringing of the composition and make the composition feel slimy and taste unpleasant." The Examiner has alleged that this statement proves that carrageenan helps in reducing the **astrigent taste** of the composition. However, the Examiner's assertions are strongly traversed for several reasons.

First, Applicants wish to point out to the Examiner that “**formability and stringing**” do not refer to a taste in the sense that the amino acids are bitter and metallic, but rather affect texture. This is clearly shown in Example 2, where carrageenan is varied in the compositions and is then evaluated, not for taste, but for formability, syneresis, smoothness, stringing, retention of Al³⁺ and feeling in use.

Secondly, Nakashima et al actually teaches away from Applicants’ invention by demonstrating that carrageenan has no effect on astringent taste. That is, in actual tests by Nakashima et al. in which astringent taste was evaluated, carrageenan was shown to have no effect on taste. In Example 4, astringent taste was investigated in columns 14-20 of the table. Nakashima clearly shows that carrageenan **does not** affect astringent taste since even though carrageenan was held constant at 0.3% throughout the test, astringent taste varied, e.g., astringent taste was rated **strong** in No. 14 (Col 17, line 19-20,), **and slight** in No. 15, 18 and 19, while it is rate “**no astringent taste**” in No. 16, 17 and 20. Thus, clearly there is no evidence that the presence carrageenan is affecting astringent taste since the taste varied from **strong** to **none** at constant carrageenan levels.

In Example 5, further test by Nakashima also **teaches away from Applicants’ invention** by also demonstrating that carrageenan has no effect on “astringent and metallic taste”. In Table 8, toothpaste samples Nos. 21, 22, and 26 exhibit a strong metallic taste as well as astringent taste, whereas samples Nos. 24 and 25 have a slight metallic taste and samples Nos. 24 and 26 have a slight astringent taste. Only samples Nos. 23 and 27 have no astringent and no metallic taste. In samples examined in this example, the carrageenan was held constant at 0.5%, a higher level than the 0.3% used in Example 4. But even with this higher level of carrageenan, **no effect was observed on astringent or metallic taste** of the mixture.

Thus, it is clear that when one skilled in the art considers the teaching of Nakashima et al. as a whole, Nakashima et al. fails to teach or in any way suggest that carrageenan will mask **astringent or metallic taste or any other taste for that matter** in an oral composition. Rather, Nakashima et al. clearly **teaches away** from Applicants’ invention by demonstrating that carrageenan **will not** mask an astringent or metallic taste in an oral composition and for that matter **do not** affect taste at all, but rather refer to **mouth feel**.

For reasons as stated hereinabove, Nakashima fails to teach an oral composition comprising an amino acid component having an undesirable taste and a sulfated polysaccharide, i.e. carrageenan, or a method of use of a sulfated polysaccharide, i.e. carrageenan, to mask the undesirable taste of an amino acid containing composition. Consequently, Nakashima et al. fails to anticipate Applicants' invention by failing to teach each and every element thereof. Accordingly, this rejection is improper and should now be withdrawn.

35 USC 103

Claims 1-3 and 5-54 stand rejected under 35 USC 103 (a) as being unpatentable over Lowry et al (US PG PUB 20020007878) in view of Nakashima et al. (U.S. Patent No. 4,645,662A). This rejection is respectfully traversed.

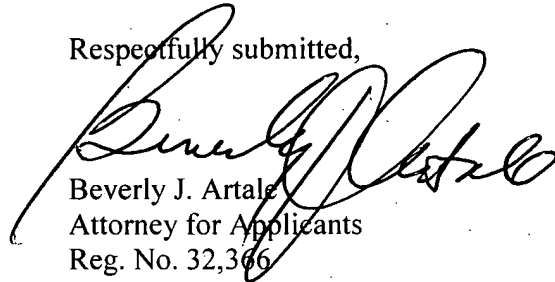
The Examiner has relied upon the Lowry et al. reference to teach a nutritional product comprising an amino acid, i.e. L-arginine, for a person having renal failure. The Examiner has admitted the deficiencies in the Lowry et al reference to render obvious Applicant's invention as now claimed. That is, the Examiner notes that Lowry et al discloses that the composition may contain carrageenan as a stabilizer in a stabilizing amount. The Examiner also states that Lowry et al. fails to teach the use of a carrageenan as a taste masking agent.

To cure this **critical** defect in Lowry et al, the Examiner has relied upon Nakashima et al. to teach that a carrageenan can be used to mask an undesirable taste. However, for reasons as stated above, Nakashima et al. fails to suggest or in anyway teach a carrageenan as an agent for masking an undesirable an amino acid taste or any other undesirable taste, for that matter. Consequently, for reasons as stated herein above, both Lowry et al or Nakashima et al, taken alone or in combination, fail to render obvious Applicants' invention as now claimed. Accordingly, this rejection is improper and should now be withdrawn.

In view of the above, it is believed that Applicants' invention as now claimed is patentable over the above-mentioned prior art. Accordingly, Applicants request

allowance of Claims 1-3, 8-20, 24-37, 38-45 and 47-54 (as re-numbered) of the
subject application.

Respectfully submitted,



Beverly J. Artale
Attorney for Applicants
Reg. No. 32,366

301 352 8577
Tel: ~~(410) 531-4769~~ *spn*
3826 Sunflower Circle.
Suite 001
Mitchellville, Maryland 20721